DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

SYSTEM OR SERIES

UPPER CRETACEOUS

N

N 121

CONOCO 1 SPRING CREEK
NE NE SEC. 15, T. 41 N., R. 72 W.,
CAMPBELL COUNTY, WYOMING
KB 4763'

N 122

TEXACO 2 PUTNAM GOVT.
NW NE SEC. 25, T. 43 N., R. 71 W.,
CAMPBELL COUNTY, WYOMING
KB 4778'

N 123

APACHE 1 GOVT.-WINN
NE NE SEC. 21, T. 44 N., R. 70 W.,
CAMPBELL COUNTY, WYOMING
KB 4838'

N 124

DAVIS 1 FED.-KEELINE
NE SE SEC. 1, T. 44 N., R. 69 W.,
CAMPBELL COUNTY, WYOMING
KB 4687'

N 125

FARMERS 1 SAPPHIRE-MILLER
SW SE SEC. 22 T. 45 N., R. 67 W.,
WESTON COUNTY, WYOMING
KB 4582'

N 126

SINCLAIR 1 MOORE
SE SE SEC. 10, T. 46 N., R. 66 W.,
WESTON COUNTY, WYOMING
KB 4655'

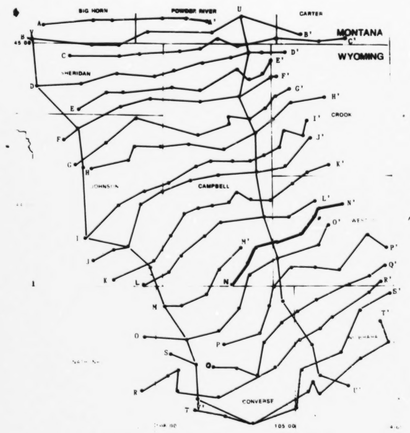
N'

LANCE FORMATION AND FOX HILLS SANDSTONE, UNDIVIDED
LEWIS SHALE
TECKLA SANDSTONE MEMBER
?TEAPOT SANDSTONE MEMBER
MESAVERDE FORMATION
PARKMAN SANDSTONE MEMBER
BASE OF ARDMORE BENTONITE BED
SUSSEX SANDSTONE MEMBER
STEELE SHALE
NIOBRARA FORMATION
SAGE BREAKS SHALE
WALL CREEK SANDSTONE MEMBER
RED BIRD SILTY MEMBER
PIERRE SHALE
MITTEN MEMBER
GAMMON FERRUGINOUS MEMBER
NIOBRARA FORMATION
SAGE BREAKS MEMBER
CARLILE SHALE
TURNER SANDY MEMBER
GREENHORN LIMESTONE
BELLE FOURCHE SHALE

STRATIGRAPHIC CROSS SECTION N –N' SHOWING ELECTRIC LOGS OF UPPER CRETAC AND OLDER ROCKS, POWDER RIVER BASIN, CAMPBELL AND WESTON COUNTIES, WYOMIN

BY JAMES E. FOX 1987

This cross section was prepared in part for the Evolution of Sedimentary Basins Program.



Map showing locations of selected wells drilled for oil and gas in the Powder River basin.

EXPLANATION

Correlation line at Group, Formation, Member, or bentonite boundaries --- Queried where correlation is uncertain.

Correlation along an unconformity --- Queried where correlation is uncertain.

* Widely used subsurface terminology.

Datum is top of Lower Cretaceous Mowry Shale.

Spontaneous potential curve
5000'
Depth of well, in feet, below Kelly Bushing (KB)
Resistivity curves

Vertical scale 1 inch = 200 feet

N 127

OPEN FILE 86-465N

N-5th-98

1 plate

093

N

N 121

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NE NE SEC. 15, T. 41 N., R. 72 W.,
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LANCE FORMATION AND FOX HILLS SANDSTONE, UNDIVIDED

LEWIS SHALE

TECKLA SANDSTONE MEMBER

TEAPOT SANDSTONE MEMBER

MESAVERDE FORMATION

PARKMAN SANDSTONE MEMBER

BASE OF ARDMORE BENTONITE BED

SUSSEX SANDSTONE MEMBER

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PIERRE SHALE

MITTEN MEMBER

GAMMON FERRUGINOUS MEMBER

NIOBRARA FORMATION

SAGE BREAKS MEMBER

CARLILE SHALE

TURNER SANDY MEMBER

GREENHORN LIMESTONE

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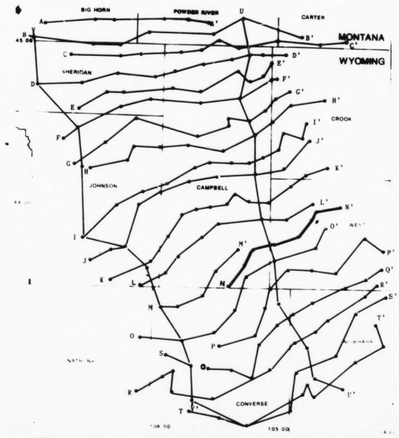

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5000'

Resistivity curves

Depth of well, in feet, below Kelly Bushing (KB)

Vertical scale 1 inch = 200 feet

2

UPPER CRETACEOUS

LOWER CRETACEOUS

JURASSIC

TRIASSIC

PERMIAN

MESAVERDE FORMATION

PARKMAN SANDSTONE MEMBER

BASE OF ARDMORE BENTONITE BED

SUSSEX SANDSTONE MEMBER

STEELE SHALE

NIOBRARA FORMATION

SAGE BREAKS SHALE

WALL CREEK SANDSTONE MEMBER

FRONTIER FORMATION

BASE OF CLAY SPUR BENTONITE BED

MOWRY SHALE

MUDDY SANDSTONE

SKULL CREEK SHALE

*"DAKOTA SILT"

INYAN KARA GROUP

MORRISON FORMATION

*"UPPER SUNDANCE FORMATION"

*"LOWER SUNDANCE FORMATION"

GYPSUM SPRING FORMATION

CHUGWATER FORMATION

GOOSE EGG FORMATION

MINNEKAHTA LIMESTONE MEMBER

OPECHE SHALE MEMBER

MINNELUSA FORMATION

RED BIRD SILTY MEMBER

PIERRE SHALE

MITTEN MEMBER

GAMMON FERRUGINOUS MEMBER

NIOBRARA FORMATION

SAGE BREAKS MEMBER

CARLILE SHALE

TURNER SANDY MEMBER

POOL CREEK SHALE MEMBER

GREENHORN LIMESTONE

BELLE FOURCHE SHALE

BASE OF CLAY SPUR BENTONITE BED

MOWRY SHALE

MUD SANDSTONE

SKULL CREEK SHALE

*"DAKOTA SILT"

INYAN KARA GROUP

MORRISON FORMATION

*"UPPER SUNDANCE FORMATION"

*"LOWER SUNDANCE FORMATION"

GYPSUM SPRING FORMATION

CHUGWATER FORMATION

GOOSE EGG FORMATION

MINNEKAHTA LIMESTONE MEMBER

OPECHE SHALE MEMBER

MINNELUSA FORMATION

N 127

SCHLAIKJER 1-25 WEBSTER

SW SW SEC. 25, T. 47 N., R. 66 W.,

WESTON COUNTY, WYOMING

KB 4493'

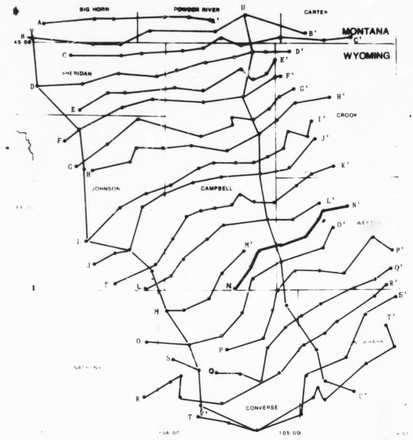
N 128

OZARK 1 FED.

NW SW SEC. 14, T. 47

WESTON COUNTY, WY

KB 4214'



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This illu... not been ... with Geol...

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PARKMAN SANDSTONE MEMBER

BASE OF ARDMORE BENTONITE BED

SUSSEX SANDSTONE MEMBER

STEELE SHALE

NIOBRARA FORMATION

SAGE BREAKS SHALE

WALL CREEK SANDSTONE MEMBER

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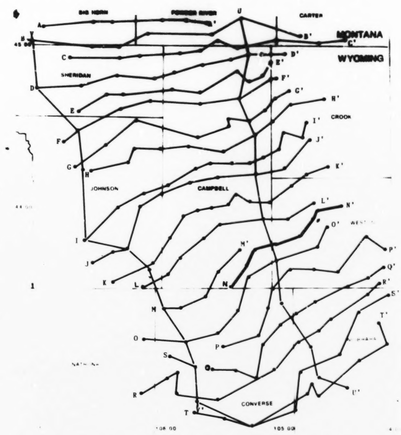

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WESTON COUNTY, WYOMING

KB 4493'

N 128

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NW SW SEC. 14, T. 47 N., R. 64 W.,

WESTON COUNTY, WYOMING

KB 4214'

U.S. Geological Survey
OPEN FILE REPORT
This illustration is preliminary and has not been edited or reviewed for conformity with Geological Survey standards.